

ABSTRACT OF THE DISCLOSURE

A method for finding a dip angle in a tilt-compensated electronic compass. The method finds a dip angle suitable for
5 current environments to calculate a more accurate azimuth angle when measuring an azimuth angle of the tilt-compensated electronic compass. The method for finding an optimal dip angle in a prescribed environment using an electronic compass containing a two-axis geomagnetic sensor includes the steps
10 of: a) setting a predetermined azimuth angle indicative of a horizontal status of a geomagnetic sensor to a reference azimuth angle; b) if the electronic compass is slightly tilted on the basis of the reference azimuth angle, stepwise-increasing a dip angle within a predetermined dip angle search
15 range, and calculating azimuth angles associated with individual dip angles; c) comparing the calculated azimuth angles with the prescribed reference azimuth angle, and finding one azimuth angle, which is the closest to the reference azimuth angle, from among the calculated azimuth
20 angles; and d) setting the dip angle applied to the found azimuth angle to a specific dip angle associated with a corresponding azimuth angle, such that a more accurate azimuth angle can be detected by the tilt-compensated electronic compass containing a two-axis geomagnetic sensor on the basis
25 of the calculated dip angle.